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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/409,347	09/30/1999	KIKUO NAITO	35:C13894	5241

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EXAMINER

KIM, CHONG R

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 07/26/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/409,347

Applicant(s)

NAITO ET AL.

Examiner

Charles Kim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-64 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-64 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_ 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 2 and 16 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The phrase “arbitrarily” in line 6 of claims 2 and 16 is unclear since it is not disclosed in the specification.

Claims 5, 19, 31, 45, and 57 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Referring to claims 5, 19, 31, 45, and 57, it is unclear whether the applicant is claiming that the watermark is removed before output, or the watermark is embedded during display. For examination purposes, the language is interpreted to mean the watermark is embedded during preparation of the display image, as described in the specification, page 63, line 25 to page 64, lines 1-2.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-6, 10, 12-19, 22, 24-32, 36, 38-58, 60, 62-64 are rejected under 35 U.S.C.

103(a) as being unpatentable over Yoshiura (U.S. Patent No. 6,131,162).

Referring to claim 1, Yoshiura discloses an information processing apparatus comprising:

- a. storage means (120) for storing data
- b. electronic watermarking means (216) for applying an electronic watermark to the data stored in the storage means (col. 12, lines 22-23)
- c. instruction means (100) for instructing the electronic means to employ a timing for applying an electronic watermark to said data (col. 13, lines 16-48 and col. 17, line 52-col. 18, line 27). It is noted that the watermark is applied either after the data is transmitted by the "provider" (col. 13, lines 16-45), or at a time the data is received by the "provider" (col. 18, lines 1-4).

Although Yoshiura discloses a setting means (100) for setting said timing for each data set stored in the storage means (col. 13, lines 16-17 and col. 18, lines 1-4), he does not explicitly state that the setting means arbitrarily sets the timing. It is noted that "arbitrarily setting" the timing in line 10, of claim 1, is interpreted to mean that the timing is set based on individual preference but not fixed, as disclosed in the applicant's specification in figure 37, element 3703.

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Yoshiura discloses that the watermark can be applied at the time the data is received by the “provider”, or at the time the data is transmitted by the “provider” and received by a “right holder” (col. 18, lines 1-9). Therefore, since Yoshiura teaches us that a plurality of signatures of right holders are embedded (col. 15, lines 65-67), it would have been obvious to set the timing arbitrarily, so that the timing is set based on the preference of the “right holder”, so he/she can chose when to apply the watermark; thus allowing for greater system flexibility.

Referring to claim 2, as best understood, Yoshiura further discloses a communication means (116) for transmitting data stored in storage means, wherein the setting means is capable of setting at least a timing for transmitting said data from said communication means (col. 16, lines 30-35), and a timing for storing said data in the storage means (col. 16, lines 22-30).

Referring to claim 3, Yoshiura further discloses an output means (116) for outputting data from said storage means, wherein setting means is capable of setting at least a timing for outputting said data from output means (col. 16, lines 30-35. Note that sending data is interpreted as being analogous to outputting data.), and a timing for storing said data in storage means (col. 16, lines 22-30).

Referring to claim 4, Yoshiura further discloses outputting data after an electronic watermark has been removed from the data (col. 27, lines 23-25. Note that filtering the mark is interpreted to mean the mark is removed before it is displayed/outputted.)

Referring to claim 5, as best understood, Yoshiura further discloses a display means (1102) for display based on said data output, wherein said display means displays said data while an electronic watermark is applied to the data (col. 25, line 61-col. 26, line 7).

Referring to claim 6, Yoshiura further discloses an output device (306) that is capable of communicating with the information processing apparatus (col. 12, lines 29-35 and figure 3).

Referring to claim 7, Yoshiura further discloses an output means that outputs data after an electronic mark has been removed from the data, as described above. Although Yoshiura fails to explicitly state that the output device removes the watermark, it would have been obvious to remove the watermark with the output device. Since embedding a watermark in data deteriorates the original data to some degree, one would be motivated to remove the watermark with the output device before outputting the data, in order to eliminate deterioration of the data as it is being outputted.

Referring to claim 10, Yoshiura further discloses an electronic watermarking means that is capable of using a plurality methods to apply an electronic watermark (col. 13, line 16-line 47 and col. 17, line 49-col. 18, line 28. Note that the method for applying the watermark for the provider/purchaser is different from the method for applying the watermark for the provider/right-holder), wherein the setting means is capable of designating an electronic watermarking method for the data (It is noted that the system 100 must inherently designate an electronic watermarking method, since there are a plurality of methods, and each method is applied in accordance to the individual/organization).

Referring to claim 12, Yoshiura further discloses a plurality of watermarking methods as described above, that includes at the least a method for employing an electronic watermark as removable (col. 14, lines 22-25) and a method for employing an electronic watermark as unremovable information (col. 13, lines 55-56).

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Referring to claim 13, Yoshiura further discloses that the setting means is capable of designating watermark information that is to be applied to the data by the electronic watermarking means (col. 13 lines 37-41. Note that generating the watermark out of the decrypted content is interpreted as being analogous to designating watermark information.), and where the electronic watermarking means applies, to the data, the watermark information designated by the setting means (col. 13, lines 42-45).

Referring to claim 14, Yoshiura further discloses a managing means (212) for managing said watermark information, wherein the electronic watermarking means is capable of employing a plurality of electronic watermarking methods as described above, where the management means employs a common form to manage the watermark information (col. 13, lines 38-40. Note that the 160-bit value is the common form for the watermark information.), regardless of whether the watermark information has a different form.

Referring to claim 15, see the rejection of at least claims 1 and 3 above. Yoshiura further discloses a communication network (figure 1) comprising an output device (306) for outputting data.

Referring to claim 16, as best understood, see the rejection of at least claim 2 above.

Referring to claim 17, see the rejection of at least claim 3 above.

Referring to claim 18, see the rejection of at least claim 4 above.

Referring to claim 19, as best understood, see the rejection of at least claim 5 above.

Referring to claim 22, see the rejection of at least claim 10 above.

Referring to claim 24, see the rejection of at least claim 12 above.

Referring to claim 25, see the rejection of at least claim 13 above.

Referring to claim 26, see the rejection of at least claim 14 above.

Claims 27-33, 36, and 38-52 recite a method which corresponds to the apparatus of claims 1-7, 10, and 12-26 respectively. Arguments analogous to those presented above with respect to claims 1-7, 10, and 12-26 are applicable to claims 27-33, 36, and 38-52. The apparatus disclosed by Yoshiura inherently teaches these methods.

Claims 53-60 and 62-64 are drawn to a storage medium on which a computer-readable control program is stored to control an information processing apparatus which corresponds to claims 1-7, 10, and 12-14. Arguments analogous to those presented above with respect to claims 1-7, 10, and 12-14 are applicable to claims 53-60 and 62-64. It is noted that Yoshiura discloses a CPU that executes programs that are loaded into a storage medium (col. 12, line 46).

2. Claims 8, 9, 11, 20, 21, 23, 34-35, 37, and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshiura (U.S. Patent No. 6,131,162), as applied to claims 1-6, 10, 12-19, 22, 24-32, 36, 38-58, 60 respectively, in further view of Stefik (U.S. Patent No. 6,233,684).

Referring to claim 8, although Yoshiura discloses an output means that outputs the data, as described above, he fails to explicitly state that when the output of the data is complete, the output device deletes the data received from the information processing apparatus. However, deleting data after the completion of data output was common in the art. For example, Stefik discloses an output device (302) that removes the data after being outputted (col. 7, lines 29-32. Note that data "which remains until it is printed out" in line 31 is interpreted to mean that the data is removed after it is printed.)



Therefore, since both Yoshiura and Stefik are concerned with controlling the distribution of digital works through watermarking, it would have been obvious to output the data with the output device of Yoshiura, wherein, when the output of the data is complete, the output device deletes the data, as taught by Stefik, in order to eliminate the possibility of the data being improperly obtained by unauthorized users.

Referring to claim 9, Yoshiura and Stefik fail to explicitly state that the output device does not halt the output process even upon receiving of a halt instruction. However, since Stefik teaches us to protect the user in the situation where the printing may become inadvertently terminated before the entire digital work is printed (col. 13, lines 17-19), it would have been obvious to continue the output/printing process even upon receiving a halt instruction. In the case where outputting the data requires a fee (Stefik, col. 13, line 13), one would be motivated to continue output even upon receiving a halt instruction, so that the user obtains the entire data that they paid for.

Referring to claim 11, Yoshiura discloses a plurality of watermarking methods as described above. However, he fails to explicitly include at least a first method for employing a watermark as visible information, and a second method for employing an electronic watermark as invisible information.

Stefik discloses that multiple watermarking technologies may be applied to the same digital work, such as a visible watermarking technology, and an invisible watermarking technology (col. 8, lines 52-55)

Therefore, it would have been obvious to include both the visible and invisible watermarking technologies of Stefik in the watermarking apparatus of Yoshiura, so if the visible watermark is removed, the invisible one may still remain (Stefik, col. 8, lines 55-56).

Referring to claim 20, see the rejection of at least claim 8 above.

Referring to claim 21, see the rejection of at least claim 9 above.

Referring to claim 23, see the rejection of at least claims 11 and 22 above.

Claims 34-35 and 37 recite a method which corresponds to the apparatus of claims 8-9 and 11 respectively. Arguments analogous to those presented above with respect to claims 8-9, and 11 are applicable to claims 34-35 and 37. The apparatus disclosed by Yoshiura inherently teaches these methods.

Claim 61 is drawn to a storage medium on which a computer-readable control program is stored to control an information processing apparatus which corresponds to claim 11. Arguments analogous to those presented above with respect to claim 11 are applicable to claim 61.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Hawkins U.S. Patent No. 6,389,421 discloses an apparatus for separating watermark data with non-watermark data for processing.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Kim whose telephone number is 703-306-4038. The examiner can normally be reached on Monday thru Thursday 8:30am to 6:00pm and alternating Fridays 9:30am to 6:00pm.

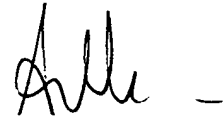
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on 703-308-6604. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

ck

ck

July 24, 2002



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